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ON THE NAUSEA AND VOMITING OF PREGNANCY.

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THE sympathy between the impregnated uterus and the stomach is well known. Among the earliest and most familiar signs of pregnancy are nausea and vomiting, which, from their chiefly occurring early in the day, are known among women as the "morning sickness." The matters ejected consist chiefly of a glairy mucus, or a sour, watery fluid. If food have been taken, this also is vomited. The symptom may occur immediately after conception, and it may continue throughout the whole period of utero-gestation; but it commonly appears about the fourth week, and ceases about the sixteenth or twentieth week. Ramsbotham considers nausea an indication of a normal condition in pregnancy, and thinks its absence betokens some dangerous or unfavorable condition; but other high authorities (Montgomery, Tanner) are of a different opinion. Dr. Gunning S. Bedford (*Clinical Lectures on the Diseases of Women and Children*, New York, 1856, p. 556) also believes that women who are not usually sick during pregnancy are very liable to miscarriage, and he is in the habit of prescribing ipecacuanha to such patients, with, he alleges, favorable results. I am acquainted with a few women who never experience nausea or vomiting in their pregnancies, but who are yet in perfect health, and have borne healthy children; and my observation would lead me to believe that women who experience nausea and vomiting are quite as likely to abort as those who are free from that symptom.

Nausea and vomiting may not only persist beyond the normal period, but by their obstinacy and violence are sometimes productive of the most serious consequences, threatening and even causing death, from exhaustion and inanition, of which an interesting example occurred in the person of the gifted Charlotte Brontë. How far this excessive sympathy is due to an abnormal condition of the uterus becomes an interesting subject for inquiry. Dr. James Henry

Bennet, whose writings have done so much of late to waken an interest in the subject of uterine disease, believes that obstinate vomiting during pregnancy is mainly caused by disease of the cervix uteri. In the third edition of his *Practical Treatise on Inflammation of the Uterus, &c.*, London, 1853, he thus expresses himself on this subject:—"When the cervix has been brought fully into view, it will be found tumid, congested, of a livid hue, voluminous, soft and only partially indurated; and on one or both lips, generally penetrating into the cavity of the os, is seen a more or less extensive ulceration, sometimes covered with large, fungous granulations." "Its fungosity [i. e., of the ulceration] is sometimes so great that it might occasion, in the minds of persons unacquainted with the above facts, the impression that the patient is affected with malignant ulceration of the organ. I have generally found ulceration of the cervix in pregnant women begin to assume this fungous character about the end of the third or fourth month of pregnancy."—(P. 160.) "One of the commonest and most distressing symptoms is an extensive aggravation of the sickness which is naturally present during the first months of pregnancy. The existence of inflammatory ulceration of the cervix, will, indeed, I firmly believe, be found to be the key to those cases of obstinate sickness which occasionally defy all medicinal aid, reduce the patient to the brink of the grave, and sometimes even render it necessary to bring on abortion in order to save the life of the mother. At least I have found such to be the case in nearly every instance of the kind in which I have been consulted, for many years since my attention has been directed to the subject."—(P. 163.)

Now it is remarkable that Dr. Bennet does not report a single case in support of this opinion, although he cites several of abortion caused by disease of the cervix. It would at least be interesting to know *how many* instances of the kind he has met with. If "luxuriant fungosity of the ulcerated surface" be exceedingly common during pregnancy, and if "one of its commonest and most distressing symptoms is an extreme aggravation of the sickness" of pregnancy, this effect ought also to be common, whereas we know it to be rare. Hence the disease of the cervix does not necessarily induce these symptoms, and there are good reasons for believing that some of the worst cases of vomiting during pregnancy may occur with a perfectly normal state of the cervix.

Dr. Clay, of Manchester, Eng., an eminent authority, has published a treatise on this subject, which I have not seen, but which is quoted by Dr. Tanner (*Signs and Diseases of Pregnancy*, London, 1860, page 386). He thinks that excessive nausea and vomiting during pregnancy is often due to "congestive inflammation and great tenderness of the os and cervix uteri." A case reported to the Boston Society for Medical Improvement, by Dr. S. D. Townsend, perhaps tends to support this view. A lady, 35 years old, had a

succession of abscesses which opened into the vagina, and were finally attended by vomiting, which was obstinate and excessive. "At last it was accidentally discovered that this symptom could be instantly controlled by raising the cervix uteri with the finger, the vomiting returning as soon as the organ was allowed to return to its natural position. The insertion of a piece of sponge into the vagina had the same effect."—(*Transactions of the Boston Society for Medical Improvement*, Vol. IV., p. 256.) No doubt the cervix was in an irritable and tender condition, which was aggravated by pressure against the sacrum to such an extent that the stomach manifested its sympathy by vomiting.

Dr. Miller, of Dorchester, has published an interesting paper on this subject in the *Boston Medical and Surgical Journal* (Vol. LXI., p. 69). He thinks the excess of this symptom is often, perhaps generally, caused by a congested or inflamed condition of the cervix, and he reports five cases in which the application of a strong ethereal tincture of iodine to the cervix and upper part of the vagina was followed by relief. In most of these cases the relief followed so quickly the application of the remedy that there seems to be no doubt that the former was the effect of the latter.

We thus see that excessive nausea and vomiting are sometimes apparently occasioned by a condition of the os or cervix uteri which may be relieved by the application of some strong stimulant or irritant, like tincture of iodine or nitrate of silver; but what is interesting in this connection is, (1) that there is no one condition of the cervix or os which is chiefly capable of producing the symptom in question. Dr. Bennet ascribes the vomiting to *ulceration*, Dr. Clay to *congestive inflammation*, and Dr. Miller to *congestion* of the cervix, and in one instance to *inflammation*, *hypertrophy* and *congestion*; and he afterwards remarks, "in all there was well-defined inflammation of the cervix, though not all equally marked." Like many others, he falls into the error of confounding congestion with inflammation. (2.) Another interesting fact is, that neither congestion, inflammation nor ulceration of the cervix or os uteri are liable to cause nausea and vomiting in the non-pregnant state, and this throws some doubt as to the true pathology of the affection. Because certain applications to the cervix are sometimes followed by relief, it does not follow that the cervix was inflamed, or that, if inflamed, it was the cure of this latter condition which caused the cessation of vomiting. A dark-red color is the normal one for the pregnant uterus, and if that be the cause of excessive nausea and vomiting, this symptom would be constant instead of rare. The cervix of the unimpregnated uterus may be entirely destroyed by cancerous ulceration without causing vomiting. If inflammation, ulceration, or even congestion be the source of the mischief, how does it happen that the vomiting will sometimes instantly cease, with-

out any remedy having been addressed to the uterus?—as in the following case:—

Case I.—Mrs. W., aged about 25 years, was the mother of two children, the youngest about two years old. She had never suffered from unusual nausea and vomiting in former pregnancies. She was debilitated from over-lactation with the youngest child, suffering from neuralgia and giddiness. She became pregnant a third time early in July, 1855, and immediately began to complain of nausea and vomiting, which increased until I was consulted, Oct. 22d. At that time she vomited apparently everything taken, on some days, while on others she suffered less from this symptom. She was ordered to keep the horizontal position, to apply chloroform to the epigastrium, to take effervescing draughts, to have her breakfast in bed, removing to the sofa an hour afterwards, &c. Under this treatment there was no vomiting for thirty-six hours, but the symptom returned with violence on the 26th. The patient tried almost all the remedies which are usually employed in these cases, with varying success; sometimes she would be free from vomiting for twenty-four hours, but there was no real improvement, and she became much emaciated and greatly debilitated. No treatment was addressed to the uterus directly, but on the 7th of November four leeches were applied to the epigastrium, against the remonstrances of the friends, who thought that the patient was already debilitated enough. Entire relief followed this experiment, and there was never any vomiting of consequence afterwards. Mrs. W. slowly recovered her strength, and was confined without accident, April 17th, 1856. The child, a boy, weighed 9 pounds. In this case no examination of the uterus was made, but if it were inflamed or congested or ulcerated, either those conditions could not have interfered with the sudden cessation of the vomiting on the 7th of November, or else they must have ceased to exist in an equally sudden manner. The following case is of a similar character.

Case II.—Mrs. S., about 26 years old, the mother of one child, became pregnant early in April, 1863. She was then not in very good health, and suffered from cough, pain in the left side, and severe facial neuralgia. In June, she began to have nausea, which increased until July 10, when the vomiting became uncontrollable, and continued so for about six days, when it was arrested, apparently by the application of morphia to a blistered surface on the epigastrium. From this time Mrs. S. did well, gained flesh, and was confined without accident, Feb. 6th, 1864. In this case, also, the suddenness of the recovery precludes the idea of organic disease of the cervix being the cause of the nausea and vomiting.

Displacement of the uterus seems sometimes to be the cause of excessive nausea and vomiting during pregnancy, although, so far as I know, these symptoms do not commonly attend that state of the

unimpregnated womb. An abstract of a case of this kind, reported by Dr. Brian to the French Academy of Medicine, may be found in Vol. LV. of the *Boston Medical and Surgical Journal*, p. 292. The case seemed approaching a fatal termination, all remedies which could be thought of having been tried in vain, when a vaginal examination was made, which showed that the uterus was completely retroverted, and incarcerated in the hollow of the sacrum. It was disengaged from this situation and placed in its normal position. Immediate relief followed, and the vomiting ceased, to return no more. The case before alluded to, reported by Dr. Townsend, may, perhaps, be referred to this head.

Case III.—Mrs. C., about 20 years old, tall, slender, who had always been delicate, began to have nausea about the end of December, 1863, being then six or eight weeks advanced in her first pregnancy. The symptom increased, and was soon accompanied by vomiting, for which all the usual remedies were tried:—mustard and chloroform externally; chloroform, lime-water, creosote, prussic acid, oxalate of cerium, ice, soda and checkerberry, bismuth, internally, gave no relief. Morphia applied to a blistered surface afforded some benefit, and this was employed twice daily, the amount used being increased from half a grain to a grain and a half, the patient keeping her bed all the time, a period of about four weeks, during which she vomited several times daily, and apparently retained very little food. Feb. 8th, four leeches were applied to the epigastrium, but without relief.

Feb. 9th, an examination was made, and the cervix was found to be prolapsed almost to the external orifice. By the speculum, it was seen to be dark-colored, but otherwise normal in appearance. It was long, and soft to the feel. A strong ethereal tincture of iodine was painted freely over the cervix. No relief followed this application, and the next day a ring pessary was applied to raise the uterus. This was followed by considerable improvement, although the patient still vomited at intervals. Feb. 14th, on examination, the cervix is found very low, and directed towards the pubes, soft, not tender, and easily raised by the finger to its normal position. The speculum showed the os to be small, closed, the exterior of the cervix healthy in appearance, and not very dark in color. It was freely painted with the iodine, which caused some smarting. The ring was removed, and a sponge was substituted, so as to keep the uterus in a normal position. The sponge was removed and cleansed daily. Much relief followed this treatment, and on the 16th the patient removed to a new house, walking up two long flights of stairs with ease. On examination by a good light, the cervix looked perfectly healthy, except a slight abrasion on one side of the os, a few lines in extent. The color was a shade darker than in the virgin state, but it was still pink, and not red. The iodine was again freely applied, and an inflated india-rubber pessary was sub-

stituted for the sponge. From this time Mrs. C. was relieved of excessive vomiting, although she was still occasionally troubled by it in the morning. She walked out, and was able to retain her food. She remained somewhat debilitated, and early in March was much annoyed by a succession of boils on the abdomen. The pessary was worn until March 21st, when the uterus had risen so high in the pelvis as to require no support. Mrs. C. was well after this time, and was confined Aug. 4th, forceps being used, on account of inefficient pains. She recovered perfectly, but was unable to nurse her child, having no nipples. The child was a boy, of large size, and is thriving on a wet nurse.

While this patient was under treatment I felt quite sure that the excessive vomiting was owing to the prolapsed condition of the uterus, and that the relief was due to the employment of the pessary. The patient thought so too; and I have no doubt that this opinion was to some extent true. It will be noticed, however, that the improvement was not instantaneous, but gradual, and that the vomiting did not cease before March 8th, or seventeen weeks after the beginning of pregnancy; and the subsequent history of Mrs. C. will show that there was something more than mere uterine displacement which caused her so much discomfort.

Jan. 2d, 1865, Mrs. C. sent for me, saying that she had been troubled with nausea for several days, and as she had had no catamenia since the last of November, she feared that she was again pregnant. She had vomited bile in the morning. On examination, the uterus being found very low, as before, a ring pessary was introduced.

Jan. 4th.—Vomiting increased. Patient anxious and desponding. The ring was removed, and a "concave" pessary, of vulcanised india-rubber, was substituted.

10th.—No relief followed the introduction of the pessary. As it was turned somewhat edgewise, a larger one was yesterday introduced in place of it. The patient is tolerably comfortable in the evening, but during the day she is constantly nauseated, and vomits apparently everything taken, besides much bile.

11th.—As Mrs. C. was no better, the concave disk was removed, and a large ring substituted. The uterus was very low, the os rather patulous and rough within. Solid nitrate of silver was applied.

13th.—No improvement. Patient vomits continually. Os uteri patulous. By the speculum it is seen to be open and granular on the inside. Nitrate of silver was applied to the inside of the cervix, and strong ethereal tincture of iodine (one drachm to the ounce) was painted over the outside freely, and a soft inflated india-rubber pessary was introduced.

14th.—No relief.

15th.—Decidedly better.

16th.—Worse again. She vomited fourteen times to-day, apparently retaining nothing on the stomach.

Mrs. C.'s friends were very anxious that she should make a visit to New York, and as I had some doubt as to the propriety of the step, in view of her debilitated condition, Dr. Putnam was asked to meet me, Jan. 17th, in consultation on the case. He recommended one drachm of the tincture of calumbo, with an equal amount of water, once in three hours, the use of an abdominal supporter, and that the patient should go to New York. The calumbo was given at once, and the patient seemed improved by it. The next day she was also better, and she continued to mend from that time. On the 18th, Mrs. C. drove out, and on the 21st she went to New York, where she arrived without great fatigue. Since that time she has been free from trouble.* The abdominal supporter was used at intervals, and, at the suggestion of Dr. Putnam, Hodge's "closed-lever" pessary was introduced, to raise the fundus of the uterus, which tended to fall backwards, producing a partial retroflexion.

In this instance the sickness lasted only about twenty days, and if its cessation were owing to any of the measures employed, it did not seem to be due to local treatment.

Before concluding this paper, already, I fear, too long, I will cite one other case, in which excessive nausea and vomiting were aggravated by salivation.

Case IV.—Mrs. M., aged 26 years, wife of a coachman, has been married about four years. She had one miscarriage at the fourth month, and one year ago was delivered of a dead child at term, after a labor lasting three days. Has never suffered before from excessive nausea and vomiting. Now, Jan. 10th, 1865, is about eight weeks pregnant. For about ten days has had constant nausea and vomiting, with extreme salivation. Throws up almost everything taken, and is confined to the bed by the prostration. Uterus very low, movable, and healthy to the touch.

I will not quote the daily record of the case, but simply say that the vomiting and salivation persisted for about fourteen days, when the former ceased, and the patient was able to be about house and even to go out; she was gaining strength and health. The salivation continued, though more moderate, when last seen, Jan. 24th. As I have not heard from her since, I presume she is doing well. The remedies chiefly employed in this case were external irritation and the internal use of extract of belladonna. No local treatment was employed; and I cannot help thinking that if it *had* been, the result would have been considered as a remarkably successful one. So difficult is it to estimate the value of remedies!

As to the treatment of these cases, it would be proper, whenever the symptom does not yield to appropriate regimen and internal remedies, to ascertain the condition of the uterus. If anything ab-

* This patient was confined, without accident, Aug. 8th. The child, a girl, weighed nine pounds. During the pregnancy, Mrs. C. succeeded in drawing out the nipples, and is now nursing her baby.

normal be discovered, either in its condition or in its situation, an appropriate local treatment should at once be instituted. In a certain number of cases this will be speedily and permanently successful; but in other, and, as I am persuaded, not a few instances, it will fail. It is to be hoped that by means of carefully recorded observations we shall know ere long how far the symptom in question be dependent on a local cause, capable of removal. What is remarkable is, that in some cases in which there seems to be no lesion of the uterus, the application of a strong irritant to the cervix and the neighboring parts of the vagina is followed by relief, apparently on the principle of revulsion, or counter-irritation, just as the same effect is produced by the application of a sinapism to the epigastrium.

On comparing the cases reported above with each other, we notice one thing which is common to them all—the patients were not in good health at the time they became pregnant. They were either originally delicate, or they had become enfeebled by excessive lactation, abortions, or other debilitating influences. How far this state of things would prove to be true in a larger number of instances I cannot say, but the subject is worth investigating. Should further observations show this to be a common condition in the excessive vomiting of pregnancy, we may, in some cases, anticipate the evil, and prevent it by recommending a good diet and tonic medicine, and by enjoining the patient to avoid, as far as possible, everything likely to lower the general health.

REPORT OF THE COMMITTEE ON THE "PROGRESS OF OPHTHALMOLOGY IN THE YEAR 1864," TO THE AMERICAN OPHTHALMOLOGICAL SOCIETY.

By B. Joy Jeffries, M.D.

[Read before the American Ophthalmological Society, June 13th, 1865.]

Your committee has not considered it within its province to enumerate or criticize all that has been said or written upon ophthalmology during the past year, but simply to bring before you what seems truly in advance of our former knowledge, and show its importance in our branch of medical science, and its bearing upon the study and practice of the profession at large.

"Mr. Newton has demonstrated several new propositions, which are so many new truths, and are further advances in mathematical knowledge."—*Locke.*

The results of the labors of Donders and his assistants upon the accommodation and refraction of the human eye which have been given to the scientific world during the year 1864, by means of the "New Sydenham Society," may properly be called "new proposi-

tions, which are so many new truths and further advances" in ophthalmology. As the members of the Society have probably ere this rendered themselves familiar with the contents of this magnificent volume, embracing the long-continued researches of Donders, it is not necessary, perhaps not even becoming, for your committee to attempt analyzing these studies, already become fixed facts in ophthalmological and optical science. An analysis of these investigations upon the refraction and accommodation of the eye is in reality the book itself. It is, therefore, but left to us to show the bearing of these important truths upon our specialty, and our relation to our medical brethren. They have revolutionized the treatment of anomalies of accommodation and refraction as thoroughly as the invention of the ophthalmoscope revolutionized the treatment of internal affections of the globe. They have, almost like the demonstration of a mathematical problem, not only determined the existence, but the treatment of myopia, hypermetropia, asthenopia and astigmatism. Together with the invention of the ophthalmoscope, the results of this application of the higher mathematics to the solution of problems in physiological optics have served to raise our specialty to a much higher grade in medical science. In speaking of ophthalmoscopic literature, an English reviewer said:—"It has been happily observed of a book that once produced much controversy—the 'Vestiges of the Natural History of Creation'—that the most conspicuous fact in connection with its history was the discovery of previously unsuspected strata of ignorance in the so-called intelligent and educated classes. In like manner the introduction of the ophthalmoscope into England was the cause of some sufficiently startling revelations of a similar kind. Many of the leading oculists were found to be unconversant with the elementary facts of optics, and were therefore unable to comprehend the principles upon which the instrument was based, or to speak of it without unconsciously falling into error."—*Ophthalmic Review*, April, 1864, p. 90.

From remarks here and there cropping out in the journals in reference to Donders's book, we fear that there are still deeper "previously unsuspected strata of ignorance among the so-called intelligent and educated" surgeons, and even oculists of our day. Let this not be said of the members of this Society. Our duty to the profession requires us to be ever eager to learn, appreciate, and adopt all advances in ophthalmological science as well as in ophthalmological medicine and surgery. In this way only can we retain the position which our medical brethren are according us, and which is the surest means of shaking off from our specialty the fungus of quackery springing up from the soil of ignorance. The name of oculist will then no longer be a doubtful term. Already out of the profession comes a call for *scientific* ophthalmologists. A non-medical writer on physiological optics says:—"In the ordinary diseases to which the eye, like other parts of the

body, is subject, we may safely confide in the skill of the experienced physician; but in the diseases to which it is liable as an optical instrument, where optical science can alone direct us, we regret that professional assistance is difficult to be found. Guided by practice, the skilful oculist may dexterously extract the crystalline lens, or make an artificial pupil; but all the refinements of optical science are requisite in the practitioner to whom we commit the care of our sight; and we trust the time is not distant when men will be expressly educated for this branch of the healing art, and exhaust in their practice the rich resources with which science can supply them."—(*North British Review*, Nov., 1856, quoted in *Jago's Entoptics*, preface, p. 9.) In reality, ophthalmoscopy and the anomalies of refraction and accommodation are already becoming almost a specialty within a specialty. No better proof is needed than this to show that new truths have been discovered requiring the special energy and study of ophthalmologists. And the year that has passed has given us all opportunity to make ourselves masters of the researches of those who are the leaders in our specialty. In this, then, ophthalmology has truly advanced.

Ophthalmic Photography.—Some advance has been made in the method employed to obtain photographs of the fundus oculi of animals, by Dr. Henry D. Noyes, of New York, Dr. A. M. Roseburgh, of Toronto, Canada, and, we believe, also by Dr. Liebreich. The fundus of the human eye has not yet been photographed, yet we cannot doubt but that it will be done. It has been suggested that the quality of the light has not, perhaps, been sufficiently studied. That is, is there not some form of illumination to which the plate, but not the eye, is particularly sensitive? The photographist and the physiologist must combine their knowledge and efforts. It will certainly be a great gain to be able to photograph important cases of internal disease of the globe, for now the difficulty and expense of producing a colored lithograph, to represent even faintly morbid changes, is very great, and we all know how impossible it is to intelligibly describe what we see.

Autophthalmoscopy.—The inventions of Prof. Coccius, of Leipsic, Dr. Giraud-Teulon, of Paris, Dr. F. Heyman, of Dresden, and N. W. Zehender, of Bern, have lately "given us the gift to see ourselves as others see us." But the power of viewing one's own optic disk and retinal vessels is not simply a physiological wonder. It gives the ophthalmic student opportunity to study for himself by himself. Indeed, a good method of training himself in ophthalmoscopy is, to become by practice *au fait* in examining his own fundus oculi. He can also thereby learn what to see and how to see it. Although autophthalmoscopy is but in its infancy, yet we already have several different forms of the instrument, both for the upright and inverted image. It would not be safe to predict the results that may be developed by the autophthalmoscope. One thing let us note. It

sprung from philosophic ophthalmologists applying the laws of optics to physiology. It was not stumbled on, but wrought out by patient investigation and experiment.

Entoptics.—Prof. Donders's researches, and more especially Dr. James Jago's, have been given to the world during the year 1864. Entoptics is certainly one of the most difficult fields of study, and has consequently been lying fallow for some time. Dr. Jago has not only given us the means of investigation, but the results of these means, when employed. Although the ophthalmoscope, and more especially the binocular, has greatly removed the necessity of entoptical examination, yet Dr. Jago has so enlarged our method of determining the position and importance of ocular spectra that we can now hardly leave out this help to our diagnosis. His investigations certainly give us a series of new truths, and are therefore advances upon our former knowledge, whether they are applied or forgotten, to be again hereafter brought forward, when some additional discovery throws them out into relief, like these ocular spectra lying unnoticed or hidden till a glimpse through a perforated card calls them up as by the magician's wand.

Retinal Structure.—Heinrich Müller's researches on the structure of the retina in man and the vertebrates, published in 1856, have been the basis of our knowledge on this subject, and his anatomical investigations seemed so firmly fixed that they were considered as absolute. But Dr. Carl Ritter has given us lately his own continuance, as one might say, of Müller's work. He has certainly made a great advance over our former knowledge of the histological elements of the retina; so that Müller's views must be greatly modified. He regrets, with his readers, that Müller's death, just as he was completing his work, took away a critic who could both appreciate and weigh the value of his investigations. Till the anatomy of the retina is exhausted, its physiology must still be in a measure hypothetical. Dr. Ritter's careful deductions and patient research have brought us a long distance in advance of where Müller and those following him left us. These are the histological elements as he gives them:—Bacillar layer, granular layer, fibrous layer, ganglion-cell layer, nerve-fibre layer. He has traced the connection of these layers, and more especially shown and explained the supporting structure which holds and sustains them. This clears up a great deal before uncertain, and the anatomy of the retina commences to assume some definite shape. He concludes his work with this paragraph, the deductions from his investigations:—"Thus determining the functions of the separate portions of the nervous structure of the retina, the bacillæ simply receive the impression, their stimulation corresponds to the sensation: the granules convert the sensation into nervous stimulation; the granular cells give the sense of color; the ganglion-cells finally determine the retina's sense of location. Although I know very well that this is hypothetical, yet I

cannot but think that a definite expression of it will be of use." Late optical and physiological studies seem to support these views. We see how far they would carry us towards the true theory of vision. This is not, of course, the place to criticize them.

Binocular Ophthalmoscope.—We owe to Dr. Giraud-Teulon, and following him, Mr. J. Z. Lawrence, our thanks for the invention of the binocular ophthalmoscope, by means of which we are enabled to save a great deal of time and uncertainty in determining the position of extravasations, exudations, deposits, &c., in the vitreous humor, retina, and choroid. It is true, as Dr. Schweigger admits, that with the monocular ophthalmoscope it is possible to ascertain nearly all that the binocular instrument can reveal to us; but a moment's glance with both eyes is worth an hour's gaze with one. Probably in a short time ophthalmologists will use it to the exclusion of the monocular ophthalmoscope. A comparison of the two would be better than any description we can here give. Time will undoubtedly simplify as well as cheapen this instrument. It is, in the highest sense of the term, an advance upon our previous means of observation. Simply as a scientific or philosophical instrument, it will be of great value, as probably enabling us to settle many points in reference to binocular vision and so-called stereoscopic effect. It is a new means of experimenting in this field of physiological optics. Its general use will be looked forward to with interest by both the philosophical and pathological ophthalmologist.

Physiology and Theory of Vision.—Physiologists and philosophical ophthalmologists have, the last few years, given a great deal of time and study to vision, and their labors have been so productive of new truths as to attract the attention of the general scientific world. This has been, perhaps, in great part due to the invention of the ophthalmoscope, and the educated research called forth by it, as it brought again more forcibly before philosophers the human eye as the most attractive field for physiological and psychological study. The record of investigations for the last ten years is mainly contained in the works which we here enumerate.* It is of course impossible to give even a *résumé* of the results these authors have arrived at. Many optical and physiological experiments, always accepted as absolute, have been disproved or different deductions drawn from them. Others have stood the test of repetition by careful observers, and thus placed us in advance of our former knowledge. A carefully conducted physiological optical experiment is, as it were, however, but the anatomy, the deduction from it the physiology of vision. Some theories of vision have been again weighed in this recent research, and in this respect the past year has been productive of new truths. Others have not stood the test of crucial experiment, and thus we have likewi se gained groundin our difficult field

* Want of space compels us to omit the list of works referred to.—*Eds. B. M. and S. Jour.*

of study. But it may be asked, how has all this laborious experimentation helped us? In what way have we been advanced by it? Our answer would be: From just these studies sprung the ophthalmoscope, the laws of accommodation and refraction, and the true meaning of strabismus.

Mr. Abbott's book, "Sight and Touch," reviews, as it were, the results of the others mentioned, with the purpose of disproving the Berkeleian theory of vision. That is, he has tested this theory by the experiments and laws, and reasoning therefrom deduced, in the long series of investigations carried on by physiological ophthalmologists the past few years. The result is, that the eye must be placed much higher among the organs of sense. Through it we gain a greater knowledge of the external world than has hitherto been conceded. The received ideas in reference to stereoscopic effect must be greatly modified. The use of two eyes seems to give us a greater amount, besides a different power, of vision gained by one. There is much we would willingly dwell upon in this book, but it is not perhaps in place here. It is proper to state that Dr. Giraud-Teulon, of Paris, prosecuted similar studies in 1860. Mr. Abbott has reversed the theory that sight was dependent upon touch; and here we have made a great advance, and can proceed upon a sounder basis in optical experiment, which must be, as it were, the anatomy for physiological deduction. "The science of philosophy must henceforth give place to the philosophy of science."

In three great points, then, has ophthalmology advanced, or an advance been made sure and proved, during the year. First, in the laws of the refractive media of the eye in health and disease; second, in the anatomy of the membrane, upon which these refractive media form the picture; and thirdly, in the means by which this retinal impression becomes visual perception. But these three taken together are "*sight.*"

The past year has not perhaps been very productive of great improvements in ophthalmic medicine and surgery. Much it is true has been proposed, but time must test its worth, and say whether or no it is more than a revival or another application of former knowledge forgotten. It must be remembered that the old proverb applies to our specialty as well as to other branches of medicine, "There is nothing new that is true, or true that is new."

Yet in the every-day life, so to speak, of ophthalmology, the past year has not left us behind. There was a spirited meeting of the "Ophthalmologische Gesellschaft" in September, and the proceedings were published by von Græfe, Hess, and Zehender. A new ophthalmic journal, the "Ophthalmic Review," was started in London, and has been kept up with spirit and in the pursuit of scientific truth. The excellent "Reports of the Royal London Ophthalmic Hospital" have also been continued. Zehender's Klinische Monatsblätter and the Annales d'Oculistique contain ever fresh material

and useful digests. The "Archiv für Ophthalmologie" has gone steadily on at the head of ophthalmic literature. A number of new and exceedingly valuable works and monographs upon various subjects have appeared from the European press, such as Schweigger's Gebrauch der Augenspiegel, Zander and Geissler's Verletzungen der Augen, Wecker's Études Ophthalmologiques, Carter's translation of Zander on the Ophthalmoscope, J. S. Wells's Lectures on Glaucoma, Canton's Arcus Senilis, and many others.

If, during these times of excitement and anxiety, we American ophthalmologists have not perhaps contributed our share towards the advancement of our science, we shall be pardoned by our medical brethren. We have, at least, by the very formation of this Association, shown that we are anxious to learn, by mutual intercourse and interchange of thought and criticism, and that we ever have in view the one great object of our specialty, the restoration of sight.—*New York Medical Journal.*

Reports of Medical Societies.

EXTRACTS FROM THE RECORDS OF THE PROVIDENCE MEDICAL ASSOCIATION. BY W. H. TRAVER, M.D., SECRETARY.

Ovarian Tumor.—Dr. Collins reported the following case, and exhibited the specimen. It occurred in a married woman, aged 58, mother of several children. The tumor first made its appearance in the left side of the abdomen about two years ago, and could be distinctly felt through its walls. Made an examination some two months since, and found some effusion of serum in the abdomen. He performed paracentesis on three occasions, and at each time some six quarts of serum were drawn off. Bowels regular, and no great difficulty was experienced in voiding her urine. The left thigh was swollen—the result of inflammation of the femoral vein. He consulted with Dr. Burnham, who advised an operation, which was performed on June 3d. The tumor was located in the right ovary, and was attached to the uterus in several places; also to the round ligaments and ascending colon. The womb was enlarged. The following morning there was great depression, and she died at noon of the same day. Dr. Collins did not profess to say what the character of the tumor was, as he had not examined it.

Ovariotomy.—Dr. Collins reported the following case of ovariotomy, occurring in the practice of Dr. Burnham. The patient was a young lady, aged 18. The tumor made its appearance about a year previous to the operation. It could be distinctly felt through the walls of the abdomen, and appeared round, in lobes or lobular. It had been twice tapped, and a large amount of serum removed. The incisions were made in the manner usually practised in operations of this kind. The tumor occupied the right ovary, and adhered to the abdomen at several points. It was hard, solid, and weighed nine pounds. The disease proved to be encephaloid. The patient was not much exhausted; pulse 116. The following morning, 130. She be-

gan to sink in the afternoon, and died during the night. Dr. Collins thought the tumor was originally multilocular, and had subsequently taken on encephaloid.

Miscarriage; Placenta Prævia.—Dr. PERRY briefly reported a case of miscarriage, complicated with placenta prævia, occurring at the fifth month of gestation. When called, he found there had been much hæmorrhage; the patient was exsanguined. After giving a large dose of ergot, he made a vaginal examination, and found the os dilated, with the placenta adherent. The placenta was detached by means of the finger, and was expelled with the fœtus. The umbilical cord was but eight inches in length.

Partial Luxation of the Radius.—Dr. ELY briefly reported several cases of injury of the elbow-joint occurring in children. Those in whom the injury occurred were unable to bend their arm, or raise it to their head. Little or no pain was experienced, and in the majority of the cases nothing abnormal could be detected, either by the eye or manipulation. It was generally produced by lifting the child by its arms. It was thought to be a partial luxation of the radius back upon the humerus. The luxation was reduced by grasping the hand and forearm, radiating it, and suddenly carrying it to the head.

THE BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON: THURSDAY, AUGUST 17, 1865.

RUSSIAN PLAGUE.—DECISION OF THE CITY GOVERNMENT WITH REGARD TO QUARANTINE.—The question of a rigid quarantine, to exclude if possible the so-called Russian plague from our city, has been wisely settled, we think, by the Board of Aldermen, in accordance with the suggestions of the Board of Consulting Physicians. This is all the more satisfactory, inasmuch as it shows that this board is not named *lucus a non lucendo*, as might have been inferred from the course of the City Government towards them for the past four years. There certainly is no good reason that this annually-elected Board should be in name only, as they have generally been, consulting physicians. We welcome, therefore, their action in the present instance as proof that the city authorities intend hereafter to give that weight to their opinion on questions of public health which is no more than their just due.

We have from time to time enlightened our readers upon the true nature of the diseases which have excited so much apprehension through the exaggerated reports in the daily press. Indeed, if we mistake not, the first authentic accounts published in this country were in the pages of this JOURNAL. Our city government had special reason for apprehension at the approach of the pestilence from the official notices which they received from Washington. The Assistant Secretary of the Treasury, on the 26th of June, addressed to the Collector of Customs in Boston a letter, enclosing a despatch from the United States Consul at Port Mahon, dated May 31st, calculated to excite much alarm, and urging a more strict enforcement of quarantine. This letter echoed the tone of popular apprehension and opinion in some parts of Europe, and urged a stringent examination of all

cargoes from Russian and Turkish ports, concluding by the suggestion that the disease was the same as the fearful plague which once devastated London, the ravages of which are so graphically depicted by Defoe.

On the 8th of June we published an abridgement of the Russian official account of this alarming epidemic, as it appeared in the London *Medical Times and Gazette*, and up to the present time we have seen nothing more satisfactory or better calculated to dispel popular apprehension on this subject. We observe that a portion of this report, translated by Dr. B. J. Jeffries, is embodied in the report of the Consulting Physicians in the document before us. Published in this connection it cannot fail to have an excellent effect, as it will reach a class of readers who do not see a medical journal from one year's end to the other. The report of the Consulting Physicians concludes as follows:—

"The Board of Consulting Physicians are satisfied, upon good authority, that the published accounts received of the extent and malignancy of the disease are highly colored and exaggerated. They are also decidedly of the opinion that even if the disease was such as has been most feared, it is not a proper subject for the restrictions of quarantine. And as such a disease has never prevailed in this locality, and as the conditions under which it prevails elsewhere do not exist here, it is neither to be expected nor feared.

"The Board, under the conviction that no quarantine is required, and that no arbitrary restrictions should be enforced, do not advise any additional stringent measures in the external sanitary relations of the city. The only change which they would suggest is, that the order issued in reference to vessels coming from southern ports where yellow fever exists, should be altered to embrace all vessels from any port in any country where malignant diseases are prevalent.

"Although the consulting physicians think that the external sanitary relations require so little change, they are very strongly of the opinion that the *internal* regulations for health do admit of, and imperiously demand, very great and important changes and reform to obtain the object for which they are made.

"When it is considered how very few of the so-called contagious diseases are really such, and how greatly even these are controlled by hygienic measures, and that the mortality of all epidemic diseases, and even their occurrence, is greatly due to the neglect or ignorance of proper sanitary or hygienic measures, always within the control of Boards of Health, the great responsibility of such bodies, and the duty and necessity of wise and faithful action on their part, is very obvious. The present hygienic condition of our city is such as to leave it unguarded against the invasion of epidemics, and quite unsafe against their prevalence; but as it is known to this Board that the City Government have had their attention called to this important subject, and are engaged in searching out the plague spots and pestilential localities in order to remove them; and are also devising measures for a general cleansing and purifying of the city, they do not enter more fully into this subject at this time, but leave it with the remark, that, if we desire or expect that the 'pestilence which walketh in darkness' should pass over us in silence, unfelt and unseen,

we must be a perfectly clean, and to the utmost within civic control, a morally pure city.

"One recommendation only is now made to the City Government, which is most earnestly and confidently offered—That the definite rules and regulations in the 'Sanitary Code for Cities,' adopted by the National Quarantine and Sanitary Convention, a copy of which is herewith transmitted, with such modifications as may be deemed necessary, should, so far as the City Charter and the laws of the Commonwealth will permit, be taken as the basis of action by the Board of Health. And if upon inquiry it should appear that any further legislation is necessary for this purpose, that it shall be procured."

The recommendation in the last clause has our own most cordial approval. The Code referred to is a most carefully and elaborately prepared system of rules, and we sincerely hope it may receive the consideration which its value and importance deserve.

Curative Treatment of Phthisis.—At a recent session of the French Academy of Sciences, M. Fuster read a communication on the curative treatment of phthisis. He announced that he had been trying, since the 11th of April last, in the clinical wards under his charge at Montpellier, in the treatment of pulmonary consumption and other affections characterized by a general consumptive condition, a method of treatment which had given him so much encouragement that he felt obliged to make it known.

His treatment consisted in the use of raw mutton or beef, together with alcohol largely diluted and in small doses. The meat, reduced to a pulp by pounding it, and passing it through a sieve to remove all the tendinous portions, is given in balls rolled in sugar, or as a sugared pulp in teaspoonful doses, in the quantity of one hundred to three hundred grammes daily. A drink made by mixing a hundred grammes with five times as much cold water sweetened, answers as a beverage for these patients. The alcoholic draught, composed of one hundred grammes of alcohol of 20 degrees Baumé, diluted with three hundred grammes of some sweetened vehicle, is given in teaspoonful doses from hour to hour; the proportion of alcohol and the interval between the doses should be varied, according to the susceptibility of the patient.

"The combination of these two agents is necessary to success in this method of treatment. The first appears to me to have a reconstructive agency, and the second a more direct action upon the blood-producing organs.

"There is nothing new in this method of medication, unless it be the combination of the two remedies mentioned and their application to consumptive patients."

The author declared that by this mode of treatment many patients affected with pulmonary consumption of a very grave character, and with purulent infection, had been perfectly cured.—*Translated from the Archives Generales de Médecine* for July, 1865.

We have received the first number of a new monthly medical journal, published at Montreal, with the title, *Gazette Médicale, Revue*

Mensuelle, Medico-Chirurgicale. It is a handsome quarto sheet, of sixteen pages, printed in large and handsome type, and promises to be a creditable representative of the medical profession in the British Provinces. We cannot refrain from remarking, however, that in the present number we find an article on the treatment of hæmorrhoids by persulphate of iron, accredited to the American Journal of British Science. Whatever it may be called, the article does not come under the head of *British* science, for it was originally published in the *Cincinnati Lancet and Observer* and copied into our pages. The editor of the journal referred to probably thought he had *Anglicised* it by carefully striking out those parts of it which betrayed its American origin; such as that the surgeon recommending this treatment was in the United States Army, and that the patient whose case is given was also a Major in our army. We can add our own testimony to its efficiency.

The subscription price of the Gazette Médicale is $2 a year.

We most cheerfully insert the following communication, regretting that we should by implication have subjected the Editor of the Dental Cosmos to the charge which he so successfully repels. It probably grew out of an accidental error on the part of the Dental Register, in crediting the article to the source from which it was originally derived.

Plagiarism.—*Messrs. Editors,*—I most heartily concur in your remarks on plagiarism, having frequently been subjected to the annoyance of this appropriation, without acknowledgment, of matter both original and selected, from the pages of a periodical with which I am connected. While, however, approving of the justness of your observations on the subject, I must disclaim the implication of dishonesty on the part of the Dental Cosmos, as the article alluded to was never presented in its columns, and it cannot be held responsible for the errors of a contemporary. In preparing matter for this periodical, I have always been particularly careful to give due credit to both author and publisher, but regret to say I have not always received equal courtesy. In order, therefore, to remove what might otherwise prove an erroneous impression respecting the character of the publication named, will you please present the foregoing statements in your valuable Journal, and oblige Very respectfully yours,

George J. Ziegler,
Editor of the Periscopic Department
Philadelphia, Aug. 8th, 1865. *of the Dental Cosmos.*

Health and Mortality of New York.—A correspondent of the *Boston Daily Advertiser* writes from New York as follows:—

"This city at present enjoys a good condition of health; indeed, it generally does in hot weather. But this humid atmosphere and intense heat must be prone to yield us a harvest of zymotic disease in some form. It is worth while to remark that a few leading maladies constitute our principal causes of mortality.

"In 1864, the reported mortality was 25,645, a death-rate of about 2½ per cent. Of this number about one half died of the following diseases:—Consumption, 3615; pneumonia, 1831; croup, 754; diphe

theria, 781; scarlatina, 899; marasmus, 1432; convulsions, 1561; hydrocephalus, 793.

"In 1863 the deaths were 25,196, of which were the following:—Consumption, 3485; pneumonia, 1713; croup, 908; diphtheria, 981; scarlatina, 903; marasmus, 1479; convulsions, 1752. About one third of the diseases were those of the respiratory system. We have little typhus and typhoid fever, and both are principally cases of emigrants.

"Cholera infantum is a cruel scourge, and from June until September writes its record indelibly. The deaths in 1863 were 1525, and last year 1311. This year the figures of 1863 will be nearest right.

"Smallpox was epidemic all winter, but has now almost totally disappeared.

"According to the Registrar, cholera was the prevailing epidemic during the twenty-two years preceding 1856, and after that diphtheria took the lead."

Cholera in Egypt.—From the same source we derive the following interesting letter on the cholera in Egypt:—

Alexandria, Egypt, July 19, 1865.

"The cholera is rapidly abating. The number of deaths reported yesterday was only 18 in Alexandria and 64 in Cairo. The maximum daily mortality has been 228 in Alexandria and 457 in Cairo.

"The whole number of deaths from cholera since the outbreak of the malady to the 18th inclusive, in Alexandria, has been 3931; in the same time 1369 deaths from other diseases have been reported, making a total of 5300. The population of Alexandria has been estimated at 175,000.

"In Cairo, from the outbreak of the malady (eight days later than at Alexandria) to the 17th inclusive, the deaths from cholera were 5249; from other diseases, 2300; total, 7549. The population of Cairo is estimated at 400,000.

"The mortality has been relatively greater in some other places. In Damietta, a town of about 40,000 inhabitants, where the disease did not appear till more than a fortnight after it had declared itself in Alexandria, the daily mortality after nine days was as high as 172, a rate which, if it had continued, would have swept the whole population of the town out of existence in eight months. The high rate happily continued but four days, and in Damietta as elsewhere there is a great amelioration.

"Very few cases have been reported at Suez, and the ravages of the disease have not extended south of Cairo.

"The north winds have continued, and the water in the Nile has begun to rise; eight inches were gained between the 10th and 16th. The alarm is rapidly yielding to more encouraging prospects."

Infantile Syphilis.—The period of incubation of infantile syphilis was much disputed in the recent discussion of the propagation of the disease through vaccination; and the question becomes still more complicated by some figures communicated by Dr. Simas, Physician to the Misericordia Hospital, Lisbon, to the Medical Society of that city. He has had under his own personal observation 216 cases of hereditary syphilis during 1858–65, and among these the symptoms

were observed in the first year in 27 cases; in the second year, in 49; in the third, in 56; in the fourth, in 30; in the fifth, in 14; in the sixth, in 16; in the seventh, in 7; in the eighth, in 2; in the ninth, in 7; in the eleventh, in 4; in the thirteenth and fourteenth, one each; and in the eighteenth, in 2. This is a very different statement to that of M. Depaul, who fixes the limit of the appearance of syphilis to seven weeks, or of MM. Diday and Roger, who fix it at three months. —*Medical Times and Gazette.*

Death of Sir John Richardson, F.R.S.—This distinguished naturalist died somewhat suddenly at Grasmere on Monday, June 12th. He was born at Dumfries in 1787, and was educated at the grammar school of his native town. On leaving school at 14 years of age he entered the University of Edinburgh, and devoted himself to the study of Medicine. After passing through the University he entered the navy as Assistant-Surgeon, and served at the siege of Copenhagen in 1807. In consequence of the zeal and ability he displayed on that memorable occasion, and "for having served in the boats during a night attack upon a French brig in the Tagus," he was promoted in 1818 to be Acting-Surgeon of the *Hercule*, a 74-gun ship. During the war with the United States, in Canada and Georgia he served as Surgeon to the 1st Battalion of Marines, and in 1819 accompanied Sir John Franklin's Arctic expedition as Surgeon and Naturalist. He also accompanied Sir John Franklin's second expedition in 1825, when he commanded two boats, in which he discovered the passage between the mouths of the Mackenzie and Coppermine rivers. In 1838 he was appointed by Lord Minto, then First Lord of the Admiralty, to be Physician to the Fleet, and in 1840 he was made Inspector of Hospitals. The deceased was the author of the "Fauna Boreali-Americana," the "Zoölogical Appendix to Sir Edward Parry's Second Voyage," the "Ichthyology of the Voyage of the *Erebus*, the *Terror*, and the *Sulphur*," and many reports and scientific papers. He received the honor of knighthood in 1846.—*Ibid.*

VITAL STATISTICS OF BOSTON.

For the Week ending Saturday, August 12th, 1865.

DEATHS.

	Males.	*Females.*	*Total.*
Deaths during the week	63	45	108
Ave. mortality of corresponding weeks for ten years, 1853—1863,	57.3	50.1	107.4
Average corrected to increased population	00	00	117·05
Death of persons above 90	0	0	0

Died,—At St. Augustine, Fla., July 19th, Dr. William E. Rice, late of South Boston, æt.

Deaths in Boston for the week ending Saturday noon, Aug. 12th, 108. Males, 63—Females, 45. Abscess, 1—accident, 1—imperforate anus, 1—apoplexy, 1—inflammation of the bowels, 1—congestion of the brain, 2—disease of the brain, 3—bronchitis, 2—cancer, 1—cholera infantum, 21—cholera morbus, 3—consumption, 10—convulsions, 2—debility, 3—diarrhœa, 6—dropsy of the brain, 2—drowned, 2—dysentery, 9—typhoid fever, 3—typhus fever, 1—fungus hæmatodes, 1—disease of the heart, 3—infantile disease, 4—insanity, 1—intemperance, 1—congestion of the lungs, 2—disease of the lungs, 1—inflammation of the lungs, 1—marasmus, 3—old age, 2—paralysis, 1—premature birth, 2—puerperal disease, 1—scrofula, 1—smallpox, 1—disease of the stomach, 1—sunstroke, 2—syphilis, 1—unknown, 4.

Under 5 years of age, 54—between 5 and 20 years, 9—between 20 and 40 years, 23—between 40 and 60 years, 13—above 60 years, 9. Born in the United States, 81—Ireland, 19—other places, 8.